The science behind napping

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Between attending classes, completing your coursework, working on your internship and applying for your Master's, you are juggling way too many balls. As a result, on many days, you cut back on sleep. And, during the day, when drowsiness starts clouding your mind, you refuel yourself with caffeine. Another three weeks to be done with exams. You think you can soldier on like this for a few more days.

Compromising on sleep can have adverse consequences on many fronts from suboptimal learning, to lowered immunity to putting you at risk for a number of psychological disorders. As far as possible, try and get at least seven hours of undisturbed sleep at night. You might even consider dropping one activity till your exams are over. That said, there is one more technique you can adopt to boost your productivity and to reduce the deleterious effects of your sleep deficit over the short-term.

In an article on the website *Psyche*, sleep scientists, Ruth Leong and Michael Chee, discuss the science of napping. Naps, according to them, are brief stretches of "sleep that occur *outside a main nocturnal period*." Further, naps are intentional unlike us dozing off while reading or watching TV. Research suggests that naps can help tide you through stressful periods when you aren't able to get sufficient sleep at night.

Through their own research, Leong and Chee worked with adolescents who had reduced sleep for consecutive nights, around five to six hours per night. If these students were allowed to nap in the day for an hour to ninety minutes, they were as alert and attentive as a control group that had nine-hours of sleep at night. The researchers, however, caution that napping cannot serve as a substitute for prolonged sleep deprivation.

Further, researchers have found that napping needn't only be used during periods of reduced sleep. Napping, during the day, may be used to enhance performance even when you've had a good night's rest. Leong and Chee cite a study that involved remembering a set of facts, for which participants were divided into three groups. The first group had two learning sessions punctuated by a 60-minute nap period. The second group was given a one-hour break in between sessions. The third group was asked to continue studying without taking a break.

All three groups were first tested half-an-hour after the second session. The nappers and the crammers outperformed those who simply took a break. However, when the subjects were retested after a week, the napping group was the only one that maintained its advantage. Thus, if you have a lot to study, napping in between may actually enhance your learning and memory.

The authors point out that the duration of napping has to be tailored to your needs. If you are getting sufficient sleep at night, but want to use naps to promote alertness or learning, then a ten to thirty-minute nap may rejuvenate you. However, if you aren't getting a good night's rest, then a one-hour nap may be better. The longer your nap duration, the more likely you will experience sleep inertia, the grogginess that befogs you upon waking. But this

usually subsides within 30-minutes of waking. The ideal time to nap for most people is mid-afternoon.

In an article in *The New York Times*, writer Jyoti Madhusoodanan cautions that naps usually involve only the "lighter phases of sleep" and do not provide the complete, restorative benefits of deep sleep. Though you may use naps to bolster your learning and alertness, try to clock in at least seven hours of sleep for a more healthful, zestful life.

(The writer is the author of *Zero Limits: Things Every 20-Something Should Know.* She blogs at www.arunasankaranarayanan.com.)